



STRATEGIES AGAINST FLU EMERGENCE

QUARTERLY REPORT

January - March 2012



April 16, 2012

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i

EXECUTIVE SUMMARY

Eleven Teaching Farms (TFs) opened this quarter. The farms were inaugurated by local dignitaries, industry executives and local farmers, who then toured the educational stations, reviewed before-and-after photographs of the farm, and listened to pre-recorded messages on biosecurity and good farming practices. Workshops prepared industry technical experts to promote and support changes at Sector 3 broiler farms. Reactions from farmers visiting the TFs suggested that seeing the biosecurity techniques in action would allow the farmers to implement them more easily on their own farms.

Regular meetings with CMU improved coordination with the national government and SAFE began preparations for a health communication workshop for the MOA, MOH and KOMNAS Zoonosis Commission. Meanwhile, meetings with FAO explored the potential for a public-private partnership between the Petugas Veteriner Unggas Komersial (PVUKs) and poultry shops in Tasikmalaya.

Community and healthy market initiatives were put into practice this quarter, with 20 field facilitators and 10 district coordinators receiving training and then being stationed in the 10 working districts. The field teams first held preparatory workshops. They then held consultative district-level meetings to select two demonstration markets and jointly develop district work plans to implement these initiatives. Healthy market initiative activities included a joint assessment, participatory mapping, and development of a healthy market improvement proposal. Capacity building was provided for the market managers at the 20 demonstration markets. This was followed by activities to generate consumer demand.

SAFE completed data collection and processing for the Healthcare Utilization Survey (HUS) once the IRB reliance had been issued by CDC Atlanta. HUS data collection in East Jakarta and Bogor was completed in February and topline findings were presented in March.

CDC Atlanta issued its approval for the Clinician KAP survey in March, and data collection commenced. This survey will be completed early next quarter, with topline findings expected early in Year 2.

In addition to hosting COP meetings and participating in AI stakeholder meetings, SAFE sponsored two GoI staff to participate in international conferences and meetings.

SAFE has been developing an Avian and Pandemic Influenza in Indonesia section for the Knowledge for Health website (K4Health) maintained by Johns Hopkins University in Baltimore.

TABLE OF CONTENTS

| EXECUTIVE SUMMARY | i |
|--|------------------|
| ABBREVIATIONS AND ACRONYMS | iv |
| OBJECTIVE I. STRENGTHEN AND EXPAND PUBLIC PRIVATE PARTNERSHIPS TO IMPROVE GOOD FARMING PRACTICES AND LIMIT AI TRANSMISSION OVERVIEW STTA ACTIVITY PROGRESS CONSTRAINTS/CHANGES | 1 1 2 6 |
| OBJECTIVE 2. PROMOTE BEHAVIORS THAT LOWER THE RISK OF AI TRANSMISSION AMONG POULTRY AND INCREASE KNOWLEDGE OF SIGNS, SYMPTOMS AND RISK FACTORS FOR AI-RELATED ILLNESSES | 10 |
| OVERVIEW | 10 |
| STTA | 10 |
| ACTIVITY PROGRESS | 10 |
| CONSTRAINTS/CHANGES | 22 |
| OBJECTIVE 3. INCREASE KNOWLEDGE OF SIGNS/SYMPTOMS AND RISK FACTORS FOR AI-RELATED ILLNESS IN PEOPLE AND PROMOTE BEHAVIORS THAT IMPROVE HOUSEHOLD- | |
| LEVEL CARE-SEEKING IN RESPONSE TO AI-RELATED ILLNESS | 25 |
| OVERVIEW | 25 |
| STTA | 25 |
| ACTIVITY PROGRESS | 25 |
| CONSTRAINTS/CHANGES | 31 |
| OBJECTIVE 4. COORDINATE WITH AND FACILITATE | |
| COMMUNICATION AMONG PARTNERS | 33 |
| OVERVIEW | 33 |
| ACTIVITY PROGRESS | 33 |
| CONSTRAINTS/CHANGES | 33 |
| BIOSECURITY IMPROVEMENT INNOVATION FUND | 35 |
| MONITORING AND EVALUATION | 35 |
| SAFE PROGRAM YEAR I HIGHLIGHTS | 38 |

ABBREVIATIONS AND ACRONYMS

ACIAR Australian Centre for International Agricultural Research

Al Avian Influenza

API Avian and Pandemic Influenza
ARI Acute Respiratory Infections

BIIF Biosecurity Improvement Innovation Fund

CDC Centers for Disease Control
CI PT. Cheil Jedang Indonesia

CMU Al Campaign Management Unit (Ministry of Agriculture)

COP Chief of Party

COTR Contracting Officer's Technical Representative

CP PT. Charoen Pokphand Indonesia

EN English language

EPT Emerging Pandemic Threats

FAO Food and Agricultural Organization of the United Nations

FHI360 Family Health International 360

GAPPI Indonesian Association of Large (Sector I & 2) Poultry Producers

GFP Good Farming Practices
Gol Government of Indonesia

GOPAN Indonesian Association of Independent Sector 3 Poultry Producers

HUS Health Utilization Survey

ICCA Institutional Communication Capacity Assessment

ID Indonesian language

IDP Indonesian Dutch Partnership

ILI Influenza-like Illness

IPB Institut Pertanian Bogor (Bogor Agricultural Institute)

IRB Institutional Review Board

JAPFA/PKP PT. Japfa Comfeed Indonesia/PT. Primatama Karyapersada

JHU-CCP Johns Hopkins Bloomberg School of Public Health, Center for

Communication Program

K4Health Knowledge for Health website hosted by John Hopkins University

KAP Knowledge, Attitudes and Practices

M&E Monitoring and Evaluation
MOA Ministry of Agriculture
MOH Ministry of Health

MOU Memorandum of Understanding

MSN Mitra Surya Nugraha

NGO Non-government Organization

QUARTERLY REPORT • JANUARY - MARCH 2012

PINSAR Indonesian Association of Independent Sector 3 Poultry Producers

(Mostly Layer Farms) and Commercial Poultry Information Center

PMI Palang Merah Indonesia (Indonesian Red Cross)

PMP Performance Monitoring Plan

PPK UI Center for Health Research at the University of Indonesia

PPL Petugas Penyuluh Lapangan (Field Investigator)

PPT Microsoft PowerPoint presentation

PVUK Petugas Veteriner Unggas Komersial (Local Government Commercial

Poultry Health Officer)

Q Quarter

RFA Request for Application
RFP Request for Proposal

SAFE Strategies Against Flu Emergence

SBCC Social and Behavior Change Communication

SOW Scope of Work

STTA Short Term Technical Assistance

TF Teaching Farm

TMF Tunas Mekar Farm

TS Technical Service

UNPAD University of Padjadjaran, Bandung

USAID United States Agency for International Development

USDA United States Department of Agriculture

WHO World Health Organization

OBJECTIVE I. STRENGTHEN AND EXPAND PUBLIC PRIVATE PARTNERSHIPS TO IMPROVE GOOD FARMING PRACTICES AND LIMIT AI TRANSMISSION

OVERVIEW

During this quarter, relationships with industry stakeholders were reinforced and further advanced by frequent visits to offices and farms, collective problem solving, and the joint goal of opening all the Teaching Farms (TFs). The Technical Service Workshops prepared the industry technical experts responsible for the farms to better communicate, motivate and support changes at the Sector 3 broiler farms that have visited the TFs. Regular monthly meetings with the CMU have improved coordination with the national government and meetings with FAO have led to the concept of a public/private partnership between the PVUKs and poultry shops in Tasikmalaya. This concept will be developed during the next quarter.

Eleven TFs opened this quarter. Each farmer conducted a grand opening where local dignitaries, industry executives and local farmers inaugurated the TFs, toured the TF educational stations, reviewed before-and-after photographs of the farm, and listened to the pre-recorded messages on biosecurity and good farming practices. Reactions from farmers visiting the TF indicate that it was helpful to see the biosecurity techniques in action, and that several of them would be easy to implement.

STTA

Jarra Jagne, a senior technical advisor previously with the USAID funded DAI STOP AI project, was in Indonesia on March 9-24, 2012 to conduct evaluation visits to TFs, meet with SAFE and FAO staff to discuss progress in the Commercial Farm and Live Bird Market studies, and work with Team Leader Paul Miller in drafting Objective I of the SAFE Year 2 work plan. Dr. Jagne offered several recommendations based on her review. Highlights are included below.

- 1. In order to strengthen the existing TF program, SAFE could:
 - Produce a manual that would explain effective cleaning and disinfection techniques; effective
 pest management strategies for rodents, flies, and other insects; effective waste treatment
 (for used litter and dead chickens); effective records management; water quality testing; and
 treatment of water with chlorine.
 - Create "job aids" that are laminated and posted at various areas on the farm, describing the important biosecurity practices in a concise manner to the farm managers and workers.
 - Translate into Indonesian "The Avian Disease Manual" by the American Association of Avian Pathologists and then distribute copies.
- 2. SAFE could include the following topics at the Technical Discussion group meetings:
 - Presentations by TS staff showcasing how they solved problems at farms
 - Technical presentations by selected industry representatives
 - Wet labs to demonstrate necropsy techniques for identification of common diseases such as CRD-colibacillosis complex, coccidiosis, and internal and external parasite infestation

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- Cleaning and disinfection demonstration/simulation
- 3. Champion Farmer Program
 - Enhance the effectiveness of this program by giving awards to the farmers together with their associated TS staff.

ACTIVITY PROGRESS

Activity I.I. Build on Existing Relationship with the Public and Private Poultry Sectors and Engage New Partners to Build Commitment for Expanded Biosecurity in the Industry and a Plan for Specific Sustainable Changes

This quarter SAFE worked closely with key personnel from the following stakeholders:

- FAO (most of the Al-related projects financed by other international and U.S. agencies are now closed);
- Educational institutions (Bogor Agricultural Institute, Padjadjaran University, SMK Nural Huda Vocational School);
- Government (DAH and CMU); and
- Commercial industry firms (CP, CJ, JAPFA/PKP, Sierad Produce, Rinjani Poultry Shop, Tunas Mekar Farm Poultry Shop, Sukahati Poultry Shop).

These consultations and coordination meetings are intended to ensure consistency in messaging, avoid duplication of effort, keep the national government informed of and fully involved with SAFE activities, secure industry involvement in leading changes at the Sector 3 broiler farm level, and, together with academic institutions, provide new opportunities for students to obtain additional hands-on experience with biosecurity and good farming practices.

The commercial industry stakeholders participated in the launches of all eleven TF openings and motivated the first group of visiting farmers to improve production, revenues and the overall health of chickens by making the changes being promoted at the TF stations.

Deliverable

List of meetings with stakeholders and field visits - completed in Q2

Activity I.2. Design, Organize and Convene an Industry Convention on Poultry Biosecurity

Deliverable

Convention summary report - completed in Q2

Activity 1.3. Establish a Biosecurity Improvement Innovation Fund

Five Biosecurity Improvement Innovation Fund (BIIF) roadshows were held this quarter – one each in Bogor, Bandung and Jakarta, and two in Tasikmalaya. The audiences mostly consisted of representatives from universities, Sector I companies and poultry associations. See the separate BIIF section for additional information and details.

Deliverables

BIIF Concept Paper – completed in Q2
BIIF literature – completed in Q3
BIIF presentation – completed in Q3 and continued into Q4

"The new biosecurity procedures will ensure healthier chickens, which will also increase our profits."

Satrio, owner of Tursinameta TF

Activity 1.4. Develop new or strengthen existing Teaching Farms that will model good farming and biosecurity practices

In the prior quarter Memoranda of Understandings (MOU) were signed. Early in this quarter, an additional six MOUs were signed with farms that agreed the necessary requirements to become a TF. Building on the in-depth and assessments schematics developed last quarter depicting the structural changes required for each farm, the changes were implemented, workers began to use the new techniques, and TFs prepared their official openings.



Mr. Muslikhin, Owner and Director, at a boot dip and sandal exchange station at Muslikhin Teaching Farm in Bogor

Later in the quarter, Indonesia's first 11 Indonesian Teaching Farms (TFs) were completed and opened. For the first time, visiting farmers were able to visualize biosecurity and good farm management practices at educational stations. Visitors saw numerous new techniques and practices, some of which are outlined below:

- New cost-effective fences installed to prevent other animals entering the farm;
- Bags of feed moved into the farm through a pass-through or pass-over system at the farm entrance gate to prevent the transfer of viruses into and out of the farm;
- Visitors as well as farm workers changing their footwear before entering the farm;
- Washing hands with soap and water to kill bacteria and viruses;
- Workers changing into washed and disinfected footwear before entering the chicken houses in order to eliminate the spread of microorganisms that birds and cats might bring into the farmyard.

To reinforce the learning experience, an MP4 audio player containing key biosecurity messages is being used at each educational station, and handouts are being distributed to each visitor. A bulletin board at the end of the tour highlights before-and-after photographs, farmer testimonials, and messages of support from influential stakeholders.

To ensure compliance and progress, SAFE and industry TS staff will monitor, support, encourage and supervise the activities at the TF.

At the end of the quarter around 60 farmers and 10 TS personnel toured the 11 TFs. Visitors' names, affiliation (e.g., Sukahati Poultry Shop) and other information was recorded in the guest registers. An exit guest book records those farmers who wish to make improvements at their farms. TS and SAFE staff will contact farmers who have visited the TF and offer them one-on-one technical assistance. Assistance will also include group discussions and sharing of problem-solving experiences. Overall, SAFE has projected that at least 300 S3BFs will visit the TFs led by their respective TS personnel. The ultimate goal is for

"We are optimistic that many farms will implement the techniques that SAFE is demonstrating at the Teaching Farms."

Dr. Paul Miller

the typical Sector 3 broiler farmer to implement the practices that he has seen, heard and read about while visiting the TF. The farmers that sign up for assistance will then be visited by TS and/or SAFE staff to discuss their individual situations. SAFE has projected a minimum of 250 technical assistance visits by TS staff to the S3BF to provide guidance on how best and cost effectively to implement biosecurity and GFPs.

Cost of Structural Changes at Teaching Farms as of March 31, 2012

| | | | | Budget (IDR) (000s) | | Contribution (%) | | |
|-----|---------------------------------------|--------------------|-------------|---------------------|---------|------------------|------|------|
| No. | Partner | Farm | District* | Total | SAFE | Farm | SAFE | Farm |
| 1 | Padjadjaran University (UNPAD) | UNPAD | Sumedang | 18,356 | 14,294 | 4,062 | 78 | 22 |
| 2 | Cheil Jedang (CJ) | Ujang | Bandung | 20,271 | 17,871 | 2,400 | 88 | 12 |
| 3 | SMK Agro Nural Huda Vocational School | SMK | Ciamis | 15,505 | 13,477 | 2,028 | 87 | 13 |
| 4 | Cheil Jedang (CJ) | Encep Rusli | Garut | 16,290 | 13,162 | 3,128 | 81 | 19 |
| 5 | Rinjani Poultry Shop | Darwin | Tasikmalaya | 13,245 | 11,345 | 1,900 | 86 | 14 |
| 6 | Bogor Agricultural University (IPB) | IPB - open houses | Bogor | 25,853 | 24,053 | 1,800 | 93 | 7 |
| 7 | Bogor Agricultural University (IPB) | IPB - closed house | Bogor | 14,264 | 12,464 | 1,800 | 87 | 13 |
| 8 | Tunas Mekar Farm (TMF) | Muslikhin | Bogor | 26,595 | 17,565 | 9,030 | 66 | 34 |
| 9 | Charoen Pokphand Indonesia.Tbk (CP) | Wahyu | Bogor | 20,581 | 17,431 | 3,150 | 85 | 15 |
| 10 | Sierad Produce | Tursinameta | Bogor | 14,162 | 11,962 | 2,200 | 84 | 16 |
| 11 | Sukahati Poultry Shop | Cikaleker | Tasikmalaya | 19,050 | 15,728 | 3,322 | 83 | 17 |
| | | | | ===== | ===== | ===== | === | === |
| | *West Java province | | | 204,170 | 169,350 | 34,820 | 83 | 17 |

Deliverables

Teaching farm concept paper - completed in Q2

Eleven TFs - launched and completed in Q4

Activity 1.5. Develop educational and informational materials for use at Sector 3 teaching farms, and educational institutions

Training and educational materials, and communication tools, best practices and methodologies to support implementation of biosecurity and good farming practices were all developed during Q3. The materials were technically reviewed by FAO, and USAID during Quarter 4, finalized and printed. The TF materials include:

- Entrance signage explaining the need to keep vehicles out of the farm
- Signage at each station explaining biosecurity practices and good farming practices
- Audio for the tour providing each visitor with additional information on biosecurity and good farming practices
- Symptoms of disease displayed at a dead chicken observation table
- Booklet describing the key disease prevention practices demonstrated at each TF (illustrated here).



In addition, the Teaching Farm display has been enlarged and made available to the three partner educational institutions for use with their students.

Deliverables

Training and Educational Material - completed in Q3

Package of communication tools, best practices and methodologies to support biosecurity implementation – completed in $\mathbb{Q}3$

Activity I.6. Train Sector I and poultry shop technical service staff and select Sector 3 farm managers to transfer their knowledge of GFP/biosecurity practices

Thirty-nine Sector I and poultry shop TS personnel underwent training in Tasikmalaya and Bogor. Training topics included (i) skills related to the supervision, management and transfer of knowledge; (ii) assessment of changes needed at Sector 3 broiler farms; and (iii) how to create budgets for the changes needed. Training focused on how to encourage and motivate farmers to implement these changes. To enable greater interaction with TS personnel and provide hands-on training, the TS training this quarter was limited to personnel who

"Health and cleanliness certainly achieves success and it would be great if Teaching Farms could be extended across Indonesia."

Sudihanto, general manager of Sierad Produce

would be taking the first groups of farmers to the TFs. More will be trained next quarter, nearer the time that the farmers in their charge visit the TF. This should help to ensure that the training is still fresh in their minds, enabling them to help their groups of farmers more effectively.

In addition, 10 TS personnel were trained at the TFs while they were taking the tours with the farmers in their charge. More TS will tour the TFs in future quarters.

Eleven farm managers received one-on-one technical assistance from SAFE staff to implement the changes required to become a TF. They were also trained in the use of the new techniques, followed by hands-on interactive practice.

Deliverables

Eleven technical/communication skills training sessions - completed in Q4

SAFE was able to collapse 11 training sessions, which companies had originally requested be held separately, into two sessions that mixed TS personnel from different companies, improving the learning process individually and across companies. In addition to the two group sessions, 11 one-on-one training sessions were held with the managers of the TFs. A total of 60 TS staff and farm managers were trained. SAFE chose to conduct an evaluation of the first TS training instead of a pre – post- test. This first training focused on the topics of leadership, communication, motivation and knowledge transfer. The results of the evaluation indicated that some of the TS staff who were new or junior benefitted fully from the training and that the more senior TS staff needed to be challenged with more advanced content. In addition, most participants wanted to spend part of the training at the TF to see the new techniques and practice in the field environment. The results of the evaluation will be used to modify the approach and agenda for the second training session that will be held for another group of TS staff in Year 2 Q1. A pre - and post - test will be conducted at this second training session.

Activity 1.7. Identify and test incentives for private industry to adopt biosecurity practices

Deliverable

As described in the Q3 Quarterly Report this deliverable was replaced with a different multi-prong approach. SAFE will use information obtained from the "Technical Information Needs Assessment: Incentives and Barriers" coupled with other assessments conducted during Year I as well as grants under the BIIF mechanism to test incentives for private industry to adopt biosecurity practices.

Activity 1.8. Develop and implement a system to monitor implementation of activities

Deliverables

Program Monitoring Plan - submitted in Q3 as part of overall SAFE PMP

Data Collection Sheets – completed in Q3

CONSTRAINTS/CHANGES

The original objective was to have 11 TFs each in a separate district. While SAFE launched 11 TFs, not all 11 districts are covered. The Sector 1 firms and poultry shops compete with each other and do not allow staff or contract farmers from other companies to visit their TFs. As a result, there is

sometimes more than one TF per district e.g. one for CP and one for a poultry shop, limiting SAFE coverage to seven districts even though there are 11 TFs. In addition to limiting visitors to contract farms only in their network, partners were often inflexible about the location of the Teaching Farm associated with their firm since finding the farm owner with the motivation to become a TF was more important to them than finding a location in a particular district (e.g. where there was not a SAFE TF). Considering anticipated funding cuts, SAFE will propose to keep the existing TFs and not extend to an additional three districts during Year 2.

| OBJECTIVE I ACTIVITIES | DELIVERABLE | QUA | RTER | | |
|--|--|-------------------------------|--------------------------------|--------------------------------|-------------------------------|
| | | I Mar 15 – Jun 15 | 2 Jun 16 – Sept 15 | 3 Sept 16 – Dec 15 | 4 Dec 16 – Mar 14 |
| ACTIVITY I Build on existing relationships with the public and private poultry sectors and engage new partners to build commitment for expanded biosecurity in the industry and a plan for specific sustainable changes | Listing of meetings with stakeholders and field visits | | 1 | | |
| ACTIVITY 2 Design, organize and convene an industry convention on poultry biosecurity | Convention Summary Report | | √ | | |
| ACTIVITY 3 | Biosecurity Innovation Fund Concept | | √ | | |
| Establish a Biosecurity Innovation Fund | Biosecurity Innovation Fund Literature Biosecurity Innovation Fund Roadshow presentation | | | √ √ | |
| ACTIVITY 4 | Teaching Farm concept write-up | | V | | |
| Develop new or strengthen existing Teaching Farms that will model good farming and biosecurity practices | Eleven (11) Teaching Farms | | | √ | √ |
| ACTIVITY 5 | Training and education material | | | √ | |
| Develop educational and informational materials for use at Sector 3 teaching farms, and educational institutions | Package of communication tools, best practices and methodologies to support biosecurity implementation | | | √ | |
| ACTIVITY 6 Train Sector I and poultry shop technical service staff and select Sector 3 farm /managers and farmers to transfer their knowledge of GFP/biosecurity practices | Eleven (11) technical/communication skills training sessions • 100 Technical Staff trained • 500 farms reached | | | | √ı |
| ACTIVITY 7 Identify and test incentives for private industry to adopt biosecurity practices | SOW and action plan with at least one Sector I firm to measure the effectiveness of biosecurity bonuses | | | | X ² |
| ACTIVITY 8 | Program Monitoring Plan | | | √ | 3 |
| Develop and implement a system to monitor implementation of activities | Data collection sheets | | | $\sqrt{}$ | |

Notes:

- Deliverable was met with fewer training sessions when industry agreed to collapse 11 training sessions into two. In relation to scaling up and number of farms in the program, in December 2011, USAID and SAFE agreed to limit the number of Teaching Farms. As a result, the number of staff trained and farms reached has been reduced. .
- Decision was made in Q3 to eliminate. Incentives will be tested through TFs and the BIIF.
- ³ Folded into overall SAFE PMP.

OBJECTIVE 2. PROMOTE BEHAVIORS THAT LOWER THE RISK OF AI TRANSMISSION AMONG POULTRY AND INCREASE KNOWLEDGE OF SIGNS, SYMPTOMS AND RISK FACTORS FOR AI-RELATED ILLNESSES

OVERVIEW

Objective 2 field activities for community and healthy market initiatives began this quarter. All 20 field facilitators and 10 district coordinators in the 10 working districts were trained and then stationed in the working areas.

The field team carried out the following activities:

- 1. Workshop on "Preparation for Field Activities for Healthy Market and Community Initiatives of SAFE Program"
- 2. Consultative meetings at the district level involving all parties concerned with the district level initiatives to discuss the selection of two demonstration markets and jointly develop a district work plan for the implementation of the initiative.
- 3. Healthy market initiative activities, consisting of a joint assessment, participatory mapping, and development of a healthy market improvement proposal
- 4. Capacity building for market managers from demonstration markets
- 5. Consumer demand generation activities.

Preparations also took place this quarter for a workshop on Health Communication for the MOA, MOH and KOMNAS Zoonosis Commission.

STTA

In this quarter, Basil Safi from JHU-CCP provided technical assistance to develop the JHU-CCP components for Objectives I-4 under the SAFE Year 2 work plan, and technical assistance for tasks under Objectives 2 and 3. Highlights of work completed during his visit included:

- Writing up draft JHU-CCP components for Objectives 1 through 4 of the SAFE Year 2 work plan, with input from all team leaders.
- Finalizing the CNA (Communication Need Assessment) ICCA (Institutional Communication Capacity Assessment) tools to be used in an assessment at the end of Year 1. This assessment will support the "Advances and Strategic Communication Training" to be organized in April for MOA, MOH and the KOMNAS Zoonosis Committee.
- Drafting the Objective 3 section of the SAFE communication strategy, with input from the team leader.

ACTIVITY PROGRESS

Activity 2.1. Conduct Analysis: KAP 2009 Secondary Data Analysis

Deliverable

KAP 2009 Secondary Data Analysis Summary Report – completed in Q2

Activity 2.2. Conduct Rapid Needs Assessment

Deliverable

SAFE Rapid Need Assessment Summary Report – completed in Q2

Activity 2.3. Update 2009 "Consensus Report: Priority Audiences and Behaviors for Reducing the Risk of Al Transmission in Indonesia"

Deliverable

2011 Consensus Report: Priority Audiences and Behaviors for Reducing the Risk of Al Transmission in Indonesia – completed in Q3

Activity 2.4. Develop Communication Strategy

Deliverables

Communication strategy development workshop – completed in Q2

Communication strategy document – completed in Q2

Activity 2.5. Organize and Conduct Consultative Meetings

Building on the provincial consultative meetings held with West Java and Banten during Q3, SAFE conducted district-level consultative meetings this quarter. The objectives of these meetings were to:

- Inform district stakeholders outside of the livestock services network about the SAFE Community and Healthy Market Initiative
- Involve all parties concerned with the district-level initiatives in the selection of two
 demonstration live bird markets from the pool of five candidates identified at the provinciallevel consultative meeting
- Jointly develop a district work plan to implement the initiative.

The participants in the district-level consultative meetings in all 10 SAFE working districts have diverse backgrounds and roles, including:

- Animal Husbandry and Agriculture Services
- District Health Services
- District Hygiene and Environmental Services
- District Trade and Industry Services
- BUMD (i.e., District Government managing traditional markets)
- District Planning Bureau
- Civic Order Officers

- Market Managers
- Dinas Pekerjaan Umum (Public Works Office)
- Local parliamentarians
- Dinas Pendapatan Kabupaten (District Revenues Office)
- SAFE Field Facilitators
- Representatives from the District PMI Red Cross Office

As a result of the meeting, the final 20 demonstration markets were chosen. The table below shows the initial pool of market candidates and the final two demonstration markets selected in the 10 districts. Selection criteria were developed in a participatory manner with livestock services and the industry and trade office (the Gol office responsible for markets) at SAFE provincial consultative meetings. Criteria for final selection included serious management commitment, permanent locations with legal standing, adequate infrastructure including access to water and sanitation facilities, the market being included in government program activities, and there being at least five poultry vendors in the market.

| No. | District | Date of Meeting | Market Candidates | Selected Markets |
|-----|--------------------|-------------------|-----------------------|-----------------------|
| | | | I. Pasar Banjarsari | I. Pasar Manis Ciamis |
| | | | 2. Pasar Manis Ciamis | 2. Pasar Pangandaran |
| - 1 | Ciamis | February 10, 2012 | 3. Pasar Kawali | |
| | | | 4. Pasar Lakbok | |
| | | | 5. Pasar Pangandaran | |
| | | | I. Pasar Rajapolah | I. Pasar Ciawi |
| | | | 2. Pasar Ciawi | 2. Pasar Rajapolah |
| 2 | Tasikmalaya | February 9, 2012 | 3. Pasar Manonjaya | |
| | | | 4. Pasar Rancabakung | |
| | | | 5. Pasar Singaparna | |
| | | | I. Pasar Guntur | I. Pasar Malangbong |
| | | | 2. Pasar Bayongbong | 2. Pasar Sukamukti |
| | | | 3. Pasar Kadungora | |
| 3 | Garut ^I | February 8, 2012 | 4. Pasar Cikajang | |
| | | | 5. Pasar Limbangan | |
| | | | 6. Pasar Sukamukti | |
| | | | 7. Pasar Malangbong | |
| | | | Pasar Soreang | I. Pasar Soreang |
| | | | 2. Pasar Cileunyi | 2. Pasar Sayati |
| 4 | Bandung | February 10, 2012 | 3. Pasar Ciwidey | |
| | | | 4. Pasar Pangalengan | |
| | | | 5. Pasar Sayati | |

| No. | District | Date of Meeting | Market Candidates | Selected Markets |
|-----|--------------------|-------------------|--------------------------|---------------------------|
| | | | I. Pasar Cililin | I. Pasar Batujajar |
| | | | 2. Pasar Batujajar | 2. Pasar Lembang |
| 5 | Bandung Barat | February 8, 2012 | 3. Pasar Cipeundeuy | |
| | | | 4. Pasar Lembang | |
| | | | 5. Pasar Cisarua | |
| | | | I. Pasar Muka | I. Pasar Sukanagara |
| | | | 2. Pasar Ciranjang | 2. Pasar Cipanas |
| 6 | Cianjur | February 9, 2012 | 3. Pasar Cikalong | |
| | | | 4. Pasar Sukanagara | |
| | | | 5. Pasar Cipanas | |
| | | | I. Pasar Sukaraja | I. Pasar Sukaraja |
| | | | 2. Pasar Parungkuda | 2. Pasar Parungkuda |
| 7 | Sukabumi | February 8, 2012 | 3. Pasar Cisaat | |
| | | | 4. Pasar Cibadak | |
| | | | 5. Pasar Pelabuhan Ratu | |
| | | | I. Jasinga | I.Pasar Citayam |
| | | | 2. Parung Panjang | 2. Pasar Jonggol |
| 8 | Bogor ² | February 14, 2012 | 3. Citeureup | |
| | | | 4. Jonggol | |
| | | | 5. Cibinong | |
| | | | I. Ciruas | I. Banjar Sari (Cinkande) |
| | | | 2. Banjar Sari (Cikande) | 2. Anyer |
| 9 | Serang | February 16, 2012 | 3. Baros | |
| | | | 4. Anyer | |
| | | | 5. Padarincang | |
| | | | I. Rangkas Bitung | I. Rangkas Bitung |
| | | | 2. Cipanas | 2. Maja |
| 10 | Lebak | February 20, 2012 | 3. Malimping | |
| | | | 4. Maja | |
| | | | 5. Mandala | |

Notes:

- ¹ In Garut, the two demonstration markets selected (Malabong and Sukamukti) were not included on the list of candidates, but had already been included in the Industry and Trade Office's renovation plan.
- ² In Bogor, Citayam Market was selected because it was considered a better match to the agreed criteria.

Deliverables

Listing of Stakeholder Meetings - completed in Q3

List of Demonstration Live Bird Markets - completed in Q3

Activity 2.6. Develop SOW and Conduct Training for PMI

From January 24 until February 2, 2012, SAFE held a workshop titled "Preparations for Field Activities for Healthy Market and Community Initiatives of the SAFE Program" at Hotel Sensa in Bandung, West Java. The Terms of Reference (TOR) were developed with input from CMU, FAO and USAID, including the addition of a Cleaning and Disinfection (C&D) session for Service Office (Dinas) representatives, and the topics and presenters for the opening day. Workshop participants included:

- 20 facilitators to be stationed in each of the 20 demonstration markets
- 10 representatives from working districts as resource persons to provide input
- two representatives from the provinces (i.e., one each from West Java and Banten)
- one representative from CMU-MOA, Jakarta

The workshop also included the following resource persons from the MOA, MOH, Provincial Livestock Service Office and FAO:

- Mr. Muhammad Azhar, UPPAI CMU, MOA, Jakarta
- Mr. Budi Hari P., Directorate for Veterinary Public Health and Post-production, MOA, lakarta
- Mrs. Tine Nurasih, Head of West Java Province Livestock Services
- Mr. Agus M. Tauhid, Head of Banten Province Agriculture and Livestock Services
- Mr. Wilfried Purba, Directorate General for Disease Control and Environmental Health (PP and PL), MOH, Jakarta
- Mr. Gunawan, FAO, Indonesia

Workshop outputs included:

- Improved facilitation capacity of facilitators and better understanding of SAFE design for community and market initiatives. The participants (facilitators and representatives from the Livestock and Animal Husbandry Services) developed skills in applying a fully participatory approach from the initial assessment to mapping, problem identification, problem solving, proposal improvement, stakeholder analysis and advocacy. Most of the participants had only limited exposure to these methods. District representatives of the Livestock and Animal Husbandry Service Offices were trained by the FAO in Cleaning and Disinfection (C&D) techniques and proper use of tools and materials.
- Good relations and coordination were developed between Livestock and Animal Husbandry Services and the SAFE implementation team (district coordinator and facilitator in each district) since they were grouped together in each session, with the Dinas representative acting as a technical resource person providing input and insight.
- District action plans were developed jointly by the SAFE team and the Livestock and Animal Husbandry Services. This included the first coordination meeting with district stakeholders to finalize demonstration market selection.

Deliverables

Signed Subcontract with PMI – completed in Q3
One Training Session – completed in Q4

Activity 2.7. Implement Healthy Market Initiative

Once the Healthy Market and Community Initiative workshop had been held, the field facilitators and coordinators were stationed in their respective districts and focused on specific field implementation interventions. Their activities during this quarter are summarized below.

Joint assessment of Healthy Market Initiative LBM candidates

The field facilitators and local government office staff jointly assessed the five LBMs each district had proposed as Healthy Market Initiative candidates during the West Java and Banten provincial consultation meetings held in Q3. Market candidates were assessed using the agreed upon selection criteria, These assessments also took into account the state of the market infrastructure, existing practices of market managers and vendors, and the potential level of participation by value chain actors.



Group discussion during field facilitator training in Bandung, January 24 – February 2, 2012. 20 field facilitators and 12 district and provincial animal health officers participated.

Assessments took place simultaneously in all 10 districts in 53 market candidates (i.e., the 50 existing candidates plus three newly proposed candidates in the districts of Bogor and Garut). Findings from these assessments included the following:

- Most of the markets are quite old, having been in operation for 15-20 years. Fundamental
 structural issues arise from the long operating period, including lack of clean water, poor
 drainage causing the market to become flooded, lack of garbage disposal facilities, and poultry
 stalls that are in bad condition and often not permanent structures.
- Several issues arose from the behaviors practiced. For example, value chain actors were not
 practicing personal hygiene behaviors, and traders were mixing a variety of poultry products.

Market management issues that also need to be resolved include the following: the market
does not have separate zones for wet and dry products, there is no waste management, water
resources are not available, and there are no regularly scheduled cleaning activities.

Participatory mapping in twenty demonstration markets

Participatory mapping was conducted in all demonstration markets by market managers, value chain actors and government staff, facilitated by SAFE field facilitators. The purpose was to give market stakeholders an opportunity to evaluate for themselves the biosecurity-related conditions and behaviors in their own market, to map the problems and issues, and then find workable solutions.

The participatory mapping was carried out simultaneously at all sites. Priority problems found in the markets related to infrastructure, behavior and policy. Many of the issues were similar to those outlined above.

Infrastructure issues highlighted the need for:

- · Improved drainage in the market
- Improvement of vendor poultry stalls and sales areas
- Clean water
- Iron bird cages
- Market flooring

Behavioral issues highlighted the need for:

- · Personal Protective Equipment (PPE), standard cutting boards and other tools
- Cleaning activities
- Waste management

Policy issues that need to be addressed include:

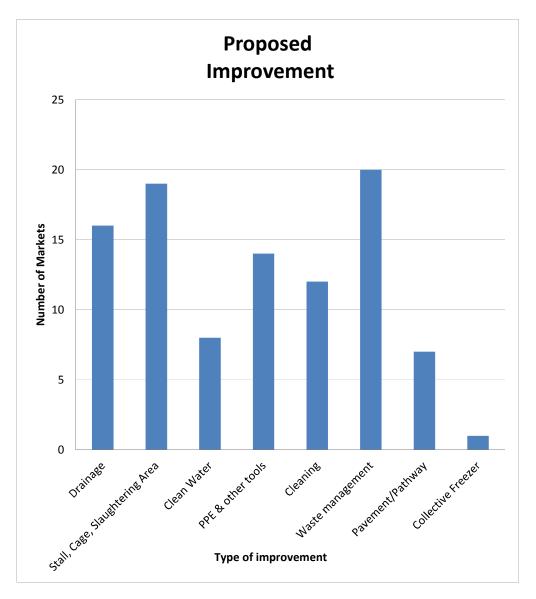
- Separation of transportation paths for poultry products and other products
- Zoning system
- Development and/or implementation of regulations on hygiene and safety

Development of Proposals for Healthy Markets Program Initiative

The results of the mapping were then used to develop a healthy market initiative plan through a participatory process involving market managers and value chain actors. This process was facilitated by the field facilitators.

Using a SAFE template that was provided, the markets translated the plan into a grant proposal. SAFE has allocated USD 6,000 for each demonstration market and has received 20 proposals, one for each demonstration market. The grants being proposed range in value between IDR 54 million and IDR 63 million. The proposals also include in-kind and matching budgets from the market side. The contributions from the market take various forms, including labor, operational costs for cleaning activities, and tools to assist with the improvements.

The accompanying chart describes the various improvements that have been proposed, and the number of demonstration markets involved in each improvement.



Deliverable

20 grants awarded to 20 demonstration LBMs in 10 districts - deferred to Q5.

The 20 grants were submitted to USAID for approval. USAID reminded the need for SAFE to conduct a review of the budgets to ensure that unit costs complied with GOI West Java Province standard unit cost and that the costs were reasonable and allowable. Review was conducted, modifications incorporated and grants were resubmitted to USAIDS. All 20 grants are scheduled to be approved and awarded in Q5.

Activity 2.8. Conduct Capacity Building Program for Market Managers and Vendors

SAFE held a market manager workshop at Wisma Kinasih in Ciawi, Bogor. Participants included:

- 20 SAFE field facilitators
- 10 district coordinators

- Market managers from the 20 demonstration markets:
 - Deni Iryanto, Parung Kuda Market, Sukabumi
 - Deny Hermawan, Sukaraja Market, Sukabumi
 - Asep Supriatna, Rangkas Bitung Market, Lebak District
 - Dadi Supardi, Maja Market, Lebak District
 - Denny H, Jonggol Market, Bogor District
 - Firman, Citayam Market, Bogor District
 - Nip Dani, Pangandaran Market, Ciamis District
 - Dede Sulaeman, Rajapolah Market, Tasikmalaya District
 - Handi H, Ciawi Market, Tasikmalaya District
 - E Mahmuds, Malangbong Market, Garut District
 - Drs. Supian, Sukamukti Market, Garut District
 - Asep Tresna, Soreang Market, Bandung District
 - Erwin, Kopo Sayati, Bandung District
 - Dedih S, Batujajar Market, West Bandung Distict
 - Deden, Lembang Market, West Bandung Distict
 - Ade, Cipanas Market, Cianjur District
 - H. Deden, Sukanagara Market, Cianjur District
 - H. Hasan, Anyer Market, Serang District
 - H. Suyayus, Cikande Market, Serang District
 - Nurchayat, Ciamis Manis Market, Ciamis District

The workshop had six sessions: (1) increasing self-reliance in healthy markets, (2) sharing best practices and practical solutions for managing healthy markets, (3) biosecurity in live bird markets (CMU-MOA), (4) field visits to Caringin Market and Ciawi Market, (5) role of the market manager in healthy market management (ASPARINDO), and (6) development of work plans for healthy market implementation by market managers, field facilitators and district coordinators.

Pre and post training evaluations were conducted using a participatory methodology. Most participants mentioned that they received a clear understanding of bio-security in the healthy live bird markets and could identify with their roles to participate in the healthy market initiatives which provided them with the capacity to develop joint work plan for the implementation of SAFE activities.

Deliverables

Training materials and curriculum - completed in Q3

Market manager workshops - completed in Q4

Activity 2.9. Conduct Customer/Consumer Demand Creation Initiative

This quarter SAFE organized two events in the demonstration markets under the PMI sub-contract to promote the creation of consumer demand:

- Peer-to-peer education among consumers
- Educational entertainment events

Peer-to-peer education among consumers

In this activity, consumers are approached through peer discussion in order to increase their knowledge about healthy poultry products and how to select them. This activity is also intended to communicate ideas about the consumers' right to receive healthy poultry and to empower consumers to ask vendors to provide only healthy poultry products.

Around 20-25 volunteers were involved in each market (200 volunteers in total) from the existing Red Cross network and village cadres. The volunteers explained basic information about healthy poultry products and encouraged consumers to ask for quality products. The activity lasted a full day and was conducted in all demonstration markets.



Consumer demand generation event in District of Serang: Head of District (Bupati) of Serang (Drs. H. A. Taufik Nuriman, MM, MBA), H. Tahyudin (PMI Chapter) and H. Hasan (Market Manager of Pasar Anyer) conduct a tour of market vendors.

Educational entertainment events

The second type of consumer demand creation initiative this quarter involved events utilizing the educational entertainment approach. These events were held in all 20 demonstration markets. The scale and range of these activities was much greater than the peer-to-peer activities described above. Activities included:

- Community service (kerja bakti) on market cleaning days
- Healthy and clean poultry stall competition
- Avian flu alert family competition (coloring competition and quiz)
- Competitions (cooking poultry products, art creation, door prizes)
- Tabligh Akbar (a religious event)
- Traditional entertainment and education (reog, jaipongan, jingle and dance competition)
- 'Cleaning the Market' action
- Talk show on local television and radio
- Musical entertainment

This quarter SAFE awarded subcontracts to NGOs Aisyiyah and COMBINE to engage consumers and implement consumer empowerment activities in the communities surrounding the demonstration markets. Aisyiyah will engage in generation of consumer demand for healthy poultry products through faith-based messages and channels, while COMBINE will maximize the use of community-based media to achieve similar results. Both organizations will coordinate closely with the facilitators in the demonstration markets.

There are several differences in the approaches being used by Aisyiyah and COMBINE. Aisyiyah's main target will be women and Muslims, and will reach out to consumers with religious messages and channels. Meanwhile, COMBINE will target the general public, maximize the use of community-based media and channels, employ educational but fun approaches, and use a media literacy approach to encourage communities to be sensitive to the environment and pay attention to AI and other health issues. Community members will be asked to capture situations in their local environment and then report back to their communities They will be encouraged to make short films about healthy market initiatives on their mobile phones and then screen these at markets and in the local community. These activities will lead to more confident communities that are primed for consumer empowerment.

Both organizations will use their media networks (including social media) to cover healthy market initiatives and related issues. They will also both hold meetings with decision makers and community leaders to persuade them to endorse the inclusion of healthy market issues in the budget allocation process at the *Musrenbang* (district planning forum). The aim is to create a perception among community leaders that with so many people and parties advocating similar issues, these issues are important and worth advocating.

COMBINE's cost share contribution was 10% of the budget. The contribution included a radio PSA campaign and the design, development and maintenance of a SMS system used to support their health protection campaign aimed at poultry product customers, and other direct costs. Aisyiyah's cost share contribution was 10.6% which included consumer empowerment community events through "Pengajian", the cost of the venue for the "Pengajian", handbook on religious messages related to poultry product safety, and other direct costs.



A market cleaning consumer initiative at Cipanas Market in Cianjur. which involved the local community, vendors, PMI volunteers, local government, and market managers.

Deliverables

Two grants awarded to Aisyiyah and COMBINE to create demand for healthy markets and products – completed in Q4

Activity 2.10. Create and Air Radio Serial Drama

During this quarter SAFE held several design sessions with the selected agency to discuss the objective, key messages, target audience and expected outcomes of the radio drama series. Based on these sessions, the agency created the narrative and storyline for the 12 episodes of the radio drama. Multiple character profiles and key messages were developed, and then delivered to SAFE for review. Basil Safi, who was here on an STTA, reviewed the content and storyline and asked the subcontractor to completely reconceptualize and redesign the serial drama. CCP, which has extensive expertise in this area, requested a deeper and clearer development of the characters so that listeners could identify with them, and a clearer storyline that would be developed in each episode. The final scripts are now being completed, and the radio drama series will be broadcast in Q5.

Deliverable

Develop and air 12 radio serial drama episodes across community radio channels across 10 priority districts - moved to Q5

Activity 2.11. Investigate Viable Mobile Phone Applications

SAFE has incorporated recommendations from Jaclyn Carlsen's STTA into the sms pilot and social media RFAs under the BIIF.

Deliverable

Report with recommendations - completed in Q3

Activity 2.12. Provide Support for Select Ministry of Agriculture Personnel to Participate in Short-Term Health Communication and Promotion Training

As explained in the previous quarterly report, it is important that this activity with the MOA be conducted together with MOH staff. Since SAFE activities with the MOH were deferred to Year 2, this activity was also deferred. This change is also in line with the One Health approach, whereby both animal and human health professionals work together to address API challenges and issues. In preparation for the Health Communication Workshop, which is now scheduled for April 16-20, 2012, several meetings were held with key strategic partners to generate feedback on the draft TOR and secure their participation in the workshop. All key partners welcomed the workshop, especially its focus on human and animal health as one approach to combating ILI, AI, and ARI. This was in line with the general agreement among government officials that human and animal health issues should not be treated in isolation.

Following feedback from the government on the draft TOR, formal invitations and the final TOR were circulated. Confirmed attendees are listed in the accompanying table.

| No. | Institution | Number of people | Participant names |
|-----|---|------------------|---|
| ١. | Zoonosis Commission | 2 | Rama Fauzi |
| | | | Sarino Trimansyah |
| 2. | MOH Unit for Health Promotion | 2 | TBD |
| 3. | MOH Unit for Public Communication | 2 | Prawito |
| | | | Giri Inayah |
| 4. | MOH Dit. Referral Hospital | 2 | TBD |
| 5. | MOH Dit. Disease Control (Sub Dit. Zoonosis, Sub | 4 | Dr. Ira Wignyadiputro |
| | Dit. Environmental Health, Sub Dit. Respiratory) | | Dr. Sinurtina Sihombing, M.Kes |
| | | | Dr. Tety Setiawati |
| 6. | Provincial Health Office, West Java | 2 | TBD |
| 7. | Provincial Health Office, Banten | 2 | TBD |
| 8. | MOA Dit. Animal Health | 2 | Drh. Pravitasari Purnama Ardini Drh. Etty Wuryaningsih |
| 9. | MOA Dit. Veterinary Public Health and Post Production | 2 | Laksmi Widyastuti Drh. Nila Sari Rahayu |
| 10. | MOA Public Promotion | 2 | TBD |
| 11. | Provincial Livestock Office, Banten | 2 | TBD |
| 12. | Provincial Livestock Office, West Java | 2 | TBD |
| 13. | Communication and Information Ministry | 3 | Aditya Ranadireksa Fera Setia Nurana |
| 14. | Ministry of Home Affairs | 2 | TBD |
| | TOTAL | 31 | |

A needs assessment for each participant is now underway. Interviews have already been conducted with the Zoonosis Commission. Other participants will be interviewed before the workshop.

Deliverables (same as Activity 3.4)

Conduct ICCA assessment with relevant MOA units - moved to Q5 (begun in Q4)

Develop capacity building training based on needs assessment – moved to Q5 (draft completed in Q4)

Implement capacity building training – moved to Q5 (April 16-22, 2012)

CONSTRAINTS/CHANGES

For reasons explained in our last quarterly report, work with our subcontractor, PMI, continues to be difficult and slow at the national level. This resulted in the movement of community and healthy market initiatives from Q3 to this quarter. Once the program was started, the field level facilitators have worked very well, but the national level continues to have difficulty submitting timely reports and filling management positions. Several meetings held at the end of this quarter, and an additional

meeting scheduled with senior PMI officials for early in Q5, aim to eliminate the existing weaknesses.

A second constraint during this quarter concerned the LBM Evaluation Study. The MOA-CMU agreed to the study but then raised several concerns that were eventually addressed but slowed down the contracting of the university to carry out the studies. As a result, implementation of the grant-supported healthy market improvements will need to wait until the first environmental sampling tests have taken place in the demonstration markets, as these will provide the baseline data.

| OBJECTIVE 2 ACTIVITIES | DELIVERABLE | QUARTER | | | | |
|---|--|--------------------------|---------------------------|---------------------------|--------------------------|--|
| | | | 2 | 3 | 4 | |
| | | Mar 15 – Jun 15 | Jun 16 – Sept 15 | Sept 16 – Dec 15 | Dec 16 – Mar 14 | |
| ACTIVITY I | KAP 2009 Secondary Data Analysis | | √ | | | |
| Conduct analysis: KAP 2009 secondary data analysis. | Summary Report | | | | | |
| ACTIVITY 2 | SAFE Rapid Need Assessment Summary | | √ | | | |
| Conduct rapid needs assessment | Report | | | | | |
| ACTIVITY 3 | 2011 Consensus Report: Priority | | | $\sqrt{1}$ | | |
| Update 2009 "Consensus Report: Priority Audiences and Behaviors for Reducing the Risk of Al Transmission in Indonesia" | Audiences and Behaviors for Reducing The Risk of Al Transmission in Indonesia | | | | | |
| ACTIVITY 4 Develop Communication Strategy | Communication Strategy Development Workshop | | √ | | | |
| Develop Communication strategy | Communication Strategy Document | | √ | | | |
| ACTIVITY 5 | Listing of stakeholder meetings | | | √ | | |
| Organize and conduct consultative meetings | List of Demonstration Live Bird Markets (LBMs) | | | V | | |
| ACTIVITY 6 | Signed subcontract with PMI | | | √ | | |
| Develop SoW and conduct training for PMI | One training session | | | | $\sqrt{2}$ | |
| ACTIVITY 7 | 20 grants awarded to 20 Demonstration | | | | X3 | |
| Implement healthy market initiative | LBMs in 10 districts | | | | | |
| ACTIVITY 8 | Training materials and curriculum | | | √ | | |
| Conduct capacity building program for market managers and vendors | 10 workshops conducted in 10 districts | | | | √ | |

| ACTIVITY 9 Conduct customer/consumer demand creation initiative | Award subcontract to one to two NGO/Community Groups to create demand for healthy markets and products | | V |
|--|---|--|-----------------------|
| ACTIVITY 10 Create and air radio serial drama | Develop and air 12 radio serial drama episodes across community radio channels across 10 priority districts | | X ⁴ |
| ACTIVITY I I Investigate viable mobile phone applications | Report with recommendations | | 1 |
| ACTIVITY 12 Provide support for select Ministry | Conduct ICCA assessment with relevant MOA units | | $\sqrt{5}$ |
| of Agriculture personnel to participate in short-term health communication and promotion | Develop capacity building training based on needs assessment | | X ⁶ |
| training | Implement capacity building training | | X ⁷ |

Notes:

- Planned in Q2; completed in Q3
- ² Planned in Q3; completed in Q4
- ³ USAID expects to issue final approval early in Q5 (April)
- 4 Moved to Q5; radio drama series to be aired beginning in Q5
- Moved to Q5 (begun in Q4)
- 6 Moved to Q5 (draft completed in Q)
- Moved to Q5 (to be implemented on April 16-22, 2012)

OBJECTIVE 3. INCREASE KNOWLEDGE OF SIGNS/SYMPTOMS AND RISK FACTORS FOR AI-RELATED ILLNESS IN PEOPLE AND PROMOTE BEHAVIORS THAT IMPROVE HOUSEHOLD-LEVEL CARE-SEEKING IN RESPONSE TO AI-RELATED ILLNESS

OVERVIEW

During this quarter, SAFE completed data collection and processing for the Healthcare Utilization Survey (HUS). The IRB reliance from CDC Atlanta was issued on February 7, 2012. HUS data collection in East Jakarta Municipality and Bogor District was completed in February and topline findings were presented in March.

CDC Atlanta approval for the Clinician KAP survey was issued in March followed by the commencement of data collection, which will be completed in April. Topline findings are scheduled for early in Year 2.

STTA

Douglas Storey from JHU-CCP visited Indonesia to assist the team in finalizing the analysis of the HUS results. His scope included:

- Completing review of the topline findings and preliminary analysis of the HUS data
- Developing a PowerPoint presentation capturing key highlights
- Developing initial strategic priorities and programmatic implications from the survey
- Presenting the topline findings to SAFE staff, USAID and partners on March 28, 2012.

ACTIVITY PROGRESS

Activity 3.1. Design, Contract and Manage a Health Utilization Survey and Clinician KAP Survey to Better Understand the Social, Economic, and Cultural Factors and Disincentives That Affect Care-seeking Behavior and Referral Follow-through in East Jakarta

Finalization of instruments for both studies

In January 2012, the instruments for both the Clinician KAP survey and the HUS study were finalized and formatted based on pre-testing results and technical input from CDC Atlanta and WHO. The CDC team inputs for HUS focused on developing questions about pneumonia prevalence and related care-seeking behavior. SAFE then translated the questionnaire into Indonesian. The Center for Health Research at the University of Indonesia (PPK UI) reformatted the questionnaire and made suggestions for improving the content and language.

Preparation for data collection

Prior to data collection activities, PPK UI recruited and trained field personnel as enumerators.

Preparations included the following:

- 1. Final formatting of survey instruments in the English and Indonesian languages
- 2. Development of detailed guidelines for the field enumerators on using the instrument, explaining each question in the questionnaire and how to complete it
- 3. Development of field manuals explaining the study, sampling methodology, interview techniques, organization, tasks and responsibilities of each field personnel, and how to maintain data quality
- 4. Obtaining all research permits needed for the study sites
- 5. Three-day training program for field coordinators and enumerators
- 6. Duplication of survey questionnaires, guidelines on instruments and field manuals.

Training of field coordinators and enumerators for HUS

The field coordinators and enumerators were trained during this quarter. Participants included 32 enumerators, four field coordinators, two SAFE and CDC staff, and PPK UI researchers. Training topics included:

- Overview by SAFE and CDC Jakarta on avian flu in Indonesia, including a technical description of seasonal influenza
- Explanation of the study, objectives and methodology
- Interview techniques
- Questionnaire techniques and a simulation
- Cross-checking and editing of data management description
- Respondent sampling and listing methods

On the second day, a simulation was carried out by all fieldwork personnel in Pasir Laja village, Sukaraja sub-district, Bogor District (not a study site). Thirty-two respondents were interviewed by 16 pairs of enumerators. The results were discussed and the questionnaire was evaluated when the class reconvened. The questionnaire format and flow were revised as a result, and it was then duplicated for use in the field.

Implementation of HUS data collection

The study was conducted in East Jakarta Municipality and Bogor District. In East Jakarta, the seven study sites were the sub-districts of Matraman, Pulogadung, Duren Sawit, Kramat Jati, Pasar Rebo, Ciracas and Makasar, which are all disease surveillance sites of CDC/Jakarta (i.e., four clinics in Matraman, Pulogadung, Duren Sawit and Kramat Jati, and six hospitals: Persahabatan, Budi Asih, Pasar Rebo, Harapan Bunda, Islam Pondok Kopi and Haji Pondok Gede). In Bogor District, seven sub-districts were selected randomly for inclusion in the study – Cijeruk, Cileungsi, Gunung Putri, Citeureup, Ciampea, Cibinong and Rancabungur.

In each selected sub-district, nine clusters (RW) were randomly selected using the simple random sampling method. The PPS method was not used since the detailed population of each RW was not available at the time of sampling. Samples therefore had to be weighted during data analysis. Twenty households were selected in each RW using the simple random sampling method.

Details of the sampling frame for each district/municipality, sub-district and RW are provided in

the accompanying tables.

I. EAST JAKARTA MUNICIPALITY

| | | | RW | Total RTs | Listed | Total |
|-----|--------------|-------------------|----------|-----------|------------|----------------|
| No. | Sub-district | Village | selected | in RW | households | questionnaires |
| I | Matraman | Kebon Manggis | 04 | 9 | 633 | 20 |
| | | Palmeriam | 05 | 12 | 345 | 20 |
| | | Kayu Manis | 01 | 15 | 561 | 20 |
| | | | 03 | 10 | 428 | 20 |
| | | | 06 | 14 | 378 | 20 |
| | | Utan Kayu Selatan | 01 | 16 | 822 | 20 |
| | | | 07 | П | 514 | 20 |
| | | | 09 | 13 | 550 | 20 |
| | | | 10 | П | 562 | 20 |
| 2 | Duren Sawit | Pondok Bambu | 02 | 18 | 2401 | 20 |
| | | Duren Sawit | 03 | 09 | 1199 | 20 |
| | | | 05 | 09 | 633 | 20 |
| | | | 16 | 09 | 773 | 20 |
| | | Malaka Jaya | 05 | 10 | 785 | 20 |
| | | | 12 | 09 | 692 | 20 |
| | | Malaka Sari | 02 | 09 | 352 | 20 |
| | | | 09 | 11 | 655 | 20 |
| | | Pondok Kopi | 06 | 10 | 539 | 20 |
| 3 | Makasar | Makasar | 02 | 15 | 1553 | 20 |
| | | | 06 | 17 | 960 | 20 |
| | | Cipinang Melayu | 04 | 09 | 815 | 20 |
| | | | 06 | 11 | 668 | 20 |
| | | | 13 | 09 | 344 | 20 |
| | | Pinang Ranti | 03 | 6 | 687 | 20 |
| | | Kebon Pala | 07 | 12 | 524 | 20 |
| | | | 12 | 09 | 534 | 20 |
| | | Halim PK | 06 | 02 | 69 | 20 |
| 4 | Pulo Gadung | Cipinang | 03 | 12 | 414 | 20 |
| | | | 05 | 16 | 1084 | 20 |
| | | Rawamangun | 12 | 16 | 502 | 20 |
| | | | 13 | 9 | 395 | 20 |
| | | Kayuputih | - 11 | 12 | 1268 | 20 |
| | | Kayuputih | 15 | П | 1320 | 20 |
| | | Pulogadung | 03 | 11 | 675 | 20 |
| | | | 07 | 12 | 510 | 20 |
| | | | 08 | П | 927 | 20 |
| 5 | Kramatjati | Cawang | 09 | 15 | 546 | 20 |
| | • | Kramatjati | 08 | 6 | 165 | 20 |
| | | , | 09 | | 1688 | 20 |
| | | Cililitan | 06 | 10 | 345 | 20 |

| | | | RW | Total RTs | Listed | Total |
|-----|--------------|----------------|----------|-----------|------------|----------------|
| No. | Sub-district | Village | selected | in RW | households | questionnaires |
| | | | 12 | 12 | 205 | 20 |
| | | | 13 | 08 | 392 | 20 |
| | | Batu Ampar | 05 | 13 | 613 | 20 |
| | | Balekambang | 03 | 14 | 745 | 20 |
| | | Tengah | 06 | 08 | 538 | 20 |
| 6 | Ciracas | Kelapa 2 Wetan | 03 | 12 | 721 | 20 |
| | | | 04 | 12 | 884 | 20 |
| | | Ciracas | 06 | 13 | 1080 | 20 |
| | | | 08 | 10 | 543 | 20 |
| | | | 09 | П | 797 | 20 |
| | | | 10 | 15 | 556 | 20 |
| | | Susukan | 07 | 13 | 867 | 20 |
| | | Cibubur | 05 | 14 | 672 | 20 |
| | | | 07 | П | 546 | 20 |
| 7 | Pasar Rebo | Pekayon | 02 | 13 | 2144 | 20 |
| | | | 03 | П | 1051 | 20 |
| | | | 06 | 08 | 853 | 20 |
| | | Cijantung | 01 | 12 | 495 | 20 |
| | | | 10 | 12 | 821 | 20 |
| | | Kalisari | 03 | 13 | 1541 | 20 |
| | | Gedong | 05 | 06 | 285 | 20 |
| | | Baru | 01 | 12 | 597 | 20 |
| | | | 06 | П | 479 | 20 |

2. BOGOR DISTRICT

| No. | Sub-district | Village | RW selected | Total RTs in RW | Listed households | Total questionnaires |
|-----|--------------|----------------|----------------|-----------------------|----------------------|----------------------|
| I | Rancabungur | Bantarsari | 03 | 4 | 188 | 20 |
| | | Bantarjaya | 05 | 3 | 192 | 20 |
| | | Pasirgaok | 06 | 3 | 234 | 20 |
| | | Mekarsari | 01 | 3 | 371 | 20 |
| | | | 04 | 4 | 305 | 20 |
| | | Rancabungur | 03 | 3 | 146 | 20 |
| | | | 10 | 5 | 380 | 20 |
| | | Cimulang | 04 | 2 | 146 | 20 |
| | | | 05 | 3 | 209 | 20 |
| 2 | Ciampea | Ciampea Udik | 09 | 3 | 149 | 20 |
| | | Cihideung Udik | 05 | 3 | 208 | 20 |
| | | | 11 | 3 | 143 | 20 |
| | | | 14 | 2 | 81 | 20 |
| | | Cinangka | 01 | 5 | 450 | 20 |
| | | | 08 | 3 | 197 | 20 |

| No. | Sub-district | Village | RW selected | Total RTs in RW | Listed households | Total questionnaires |
|-----|--------------|-------------------|----------------|-----------------------|----------------------|----------------------|
| | | Cibadak | 06 | 6 | 457 | 20 |
| | | Bojong Rangkas | 02 | 5 | 478 | 20 |
| | | Bojong Jengkol | 10 | 3 | 186 | 20 |
| 3 | Cijeruk | Cipelang | 02 | 5 | 476 | 20 |
| | , | | 07 | 6 | 445 | 20 |
| | | Cipicung | 01 | 5 | 425 | 20 |
| | | | 02 | 4 | 252 | 20 |
| | | | 04 | 5 | 429 | 20 |
| | | | 07 | 4 | 405 | 20 |
| | | Sukaharja | 07 | 7 | 326 | 20 |
| | | Tajur Halang | 06 | 3 | 182 | 20 |
| | | Cijeruk | 02 | 4 | 283 | 20 |
| 4 | Cibinong | Ciri Mekar | 05 | 3 | 176 | 20 |
| | 8 | | 07 | 4 | 277 | 20 |
| | | Cibinong | 02 | 3 | 404 | 20 |
| | | Nanggewer Mekar | 07 | 7 | 284 | 20 |
| | | Sukahati | 2 | 4 | 317 | 20 |
| | | | 12 | 7 | 222 | 20 |
| | | Karadenan | 2 | 4 | 340 | 20 |
| | | | 7 | 10 | 545 | 20 |
| | | Pondok Rajeg | 9 | 3 | 140 | 20 |
| 6 | Citeureup | Citeureup | 6 | 5 | 292 | 20 |
| | | Karang Asem Timur | 5 | 4 | 367 | 20 |
| | | Tarikolot | 6 | 2 | 133 | 20 |
| | | Gunung Sari | 4 | 8 | 642 | 20 |
| | | Tajur | 8 | 4 | 403 | 20 |
| | | Sanja | 3 | 6 | 368 | 20 |
| | | Leuwinutug | 7 | 2 | 255 | 20 |
| | | Hambalang | 2 | 3 | 275 | 20 |
| | | - Tambulang | 4 | 3 | 303 | 20 |
| 7 | Gunung Putri | Wanaherang | 4 | 3 | 362 | 20 |
| | Sanang racir | Ciangsana | 24 | 7 | 423 | 20 |
| | | - Changoana | 25 | blok II - | 341 | 20 |
| | | | 10 | 2 | 93 | 20 |
| | | Bojong Kulur | 4 | 4 | 360 | 20 |
| | | -010.19 170101 | 41 | 5 | 340 | 20 |
| | | Cicadas | 16 | 4 | 328 | 20 |
| | | Karanggan | 4 | 8 | 717 | 20 |
| | | Gunung Putri | 14 | 3 | 147 | 20 |
| 8 | Cileungsi | Cipenjo | 6 | 6 | 333 | 20 |
| 0 | Cilcuitgsi | Ciperijo | 7 | 5 | 216 | 20 |
| | | Cileungsi | 7 | 5 | 494 | 20 |
| | | Cileurigsi | / |) 3 | 774 | 20 |

| No. | Sub-district | Village | RW selected | Total RTs in RW | Listed households | Total questionnaires |
|-----|--------------|-----------------|----------------|-----------------------|----------------------|----------------------|
| | | | 13 | 4 | 172 | 20 |
| | | | 14 | 5 | 396 | 20 |
| | | Cileungsi Kidul | 6 | 3 | 457 | 20 |
| | | Dayeuh | 9 | 6 | 446 | 20 |
| | | Cipeucang | 10 | 3 | 258 | 20 |
| | | Situsari | 8 | 5 | 335 | 20 |

Data collection and listing of households took approximately 30 days, including several days for hard-to-reach respondents. A total of 2,520 respondents were surveyed in East Jakarta Municipality and Bogor District (1,260 respondents in each district/municipality). An average of 9 per cent of respondents refused to participate in the survey.

Development of population list and respondent selection for HUS

In each selected RW, a list of households was obtained from either the head of the RW or the heads of the respective RTs prior to data collection. Where the list was available at the RW level, enumerators could use this population list as the basis for selecting respondents. Where this list was not available, enumerators had to visit each RT to obtain the list of households. This was followed by validation of the list provided, with necessary adjustments being made to accommodate conditions in the field.

After obtaining the RW population list, 40 respondents (20 samples plus 20 reserve samples) were selected by the field coordinator together with enumerators using the simple random sampling method. Reserve samples were used when sample respondents were not at home or refused to participate. Respondent selection used the random number table.

On average, interviews lasted 45 minutes per respondent. After all completed questionnaires had been checked and edited, the field coordinator randomly selected 5 percent (120) of the questionnaires to conduct spot-checks. This involved revisiting the respondents and re-interviewing them on key questions, either the same day or on the day after the original interview. The field coordinators identified no major issues or discrepancies.

Deliverables:

Health Utilization Survey Report - completed in Q4

Clinician KAP Survey Report - moved to Q5

The KAP Survey data collection began late in Q4 following substantial input from stakeholders and several changes being made to the instrument.

Activity 3.2. Design, Implement and Produce a Formative Research Report on Western Java Care-seeking Behaviors and Barriers, in Consultation with WHO

Once the research data became available, Douglas Storey reviewed the data and developed a PowerPoint presentation report and provided the topline findings and a preliminary analysis of the data. The topline findings report was presented and distributed to WHO, CDC and USAID. SAFE

asked for input and recommendations for further analysis. The final analysis will be fed into development of Objective 3 activities. A final report will be provided in Q5 once additional analyses have been conducted and CDC components incorporated.

Activity 3.3. Develop a Communication Strategy for Targeted Populations that Will Increase Knowledge on Signs and Symptoms of ILI/ARI in Humans, Practices Associated with Bird-to-Human Transmission of AI, and Appropriate Care-Seeking Practices.

A draft communication strategy for Objective 3 was developed during Mr. Safi's STTA. This strategy will be finalized using the results of the HUS and KAP survey findings and input from stakeholders during the work plan retreat. The strategy will be incorporated into the existing overall SAFE communication strategy and available early in Q5.

Activity 3.4. Provide Support for Selected Ministry of Health Personnel to Participate in Health Communication and Promotion Training Program

Activity 3.4 will be implemented together with Activity 2.12.

Deliverables (same as Activity 2.12)

Capacity Building Workshop - moved to Q5

Distance e-learning program proposal - changed to K4Health

Based on discussions with MOA and MOH staff and in view of limited Internet access, SAFE will no longer develop an Internet-based learning program. In lieu of this, communication resources will be made available to all on the K4Health website.

CONSTRAINTS/CHANGES

There was a significant delay in finalizing the survey instruments for both research studies due to the complexity of the studies and the number of stakeholders and objectives involved. Nevertheless, SAFE believes that the research instruments were strengthened through this process and the studies' results will be that much richer and valid. Also contributing to the delay was waiting for the IRB reliance. These delays led to subsequent delays in translating the instruments, pre-testing the instruments, and conducting interviewer training. HUS data collection began on February 8, 2012 after receiving the IRB reliance. A second challenge that arose during data collection was the listing of the households in each RW (hamlet) in East Jakarta. Due to the large number of RTs (neighborhood associations) in each RW, and the limited data on households in each RT, it took the team longer to list the households.

The Clinician KAP study experienced similar delays. In this case, the IRB reliance was received from CDC Atlanta on March 8, 2012, with data collection commencing on March 12, 2012.

| OBJECTIVE 3 ACTIVITIES | DELIVERABLE | QUARTER | | | |
|--|---|--------------------------|---------------------------|---------------------------|--------------------------|
| | | | 2 | 3 | 4 |
| | | Mar 15 – Jun 15 | Jun 16 – Sept 15 | Sept 16 - Dec 15 | Dec 16 - Mar 14 |
| ACTIVITY I | Health Utilization Survey Report | | | | √ |
| Design, contract and manage a health utilization survey and clinician KAP survey to better understand the social, economic, and cultural factors and disincentives that affect care-seeking behavior and referral follow-through in East Jakarta | Clinician KAP Survey Report | | | | Xı |
| ACTIVITY 2 | Care-seeking Behaviors and Barriers | | | | $\sqrt{2}$ |
| Design, implement and produce formative research report on Western Java care-seeking behaviors and barriers in consultation with WHO | Report | | | | |
| ACTIVITY 3 | Communication Strategy | | | | $\sqrt{3}$ |
| Develop a communication strategy for targeted populations that will increase knowledge on signs and symptoms of ILI/ARI in humans, practices associated with bird-to-human transmission of AI, and appropriate care-seeking practices | | | | | |
| ACTIVITY 4 | Capacity building workshop | | | | √4 |
| Provide support for selected Ministry of Health personnel to participate in health communication and promotion training program | Distance e-learning program proposal (All jointly with Objective 2) | | | | √5 |

Notes:

- ¹ Clinician KAP Survey report will be completed and available in Q5.
- 2 Care-seeking Behaviors and Barriers Report. Draft was presented as PPT presentation. A final report will be submitted in Q5.
- ³ Communication Strategy will be finalized once the Clinician KAP Survey is completed.
- ⁴ Moved to Q5.
- ⁵ Replaced with the K4Health site.

OBJECTIVE 4. COORDINATE WITH AND FACILITATE COMMUNICATION AMONG PARTNERS

OVERVIEW

SAFE continues to host COP meetings and participate in AI stakeholder meetings. This quarter SAFE sponsored participation of two GoI staff in international conferences and meetings. SAFE is now developing an Avian and Pandemic Influenza in Indonesia section for the Knowledge for Health website (K4Health) maintained by Johns Hopkins University in Baltimore.

ACTIVITY PROGRESS

Activity 4.1. Organize and Host Monthly Chief of Party Meetings

SAFE hosted API Chief of Party (COP) meetings on January 4 and February 8, 2012. No COP meeting was held in March 2012.

Activity 4.2. Support Project-related Domestic and International Travel for Indonesian Government Counterparts or Other Parties

As requested, SAFE will provide financial support for Indonesian government counterparts and other relevant stakeholders to participate in key meetings, conferences and study tours.

SAFE sponsored Dr. I Made Artika, Senior Research Fellow at the Eijkman Institute for Molecular Biology, to attend the International Conference on Emerging Infectious Diseases (ICEID) held in March 2012 in Atlanta.

SAFE also sponsored Dr. Tjandra Yoga Aditama, Director General of Communicable Disease Control, to travel to Atlanta, Georgia and Washington, DC for meetings with the Centers for Disease Control (CDC) Al team, the National Institutes of Health (NIH) and USAID/Washington.

Activity 4.3. Disseminate Best Practices and Lessons Learned

SAFE developed the API/Indonesia site in the Knowledge for Health website (www.k4health.org). The structure and mapping of this site was developed and several documents have been uploaded. SAFE will submit the site to USAID for approval. Once the site is approved, SAFE will work with other stakeholders to populate the site with documents and information and go live.

CONSTRAINTS/CHANGES

None

| OBJECTIVE 4 ACTIVITIES | DELIVERABLE | | QUARTER | | | |
|--|---|-------------------------------|--------------------------------|-------------------------------|------------------------------|--|
| | | I Mar 15 – Jun 15 | 2 Jun 16 – Sept 15 | 3 Sept 16- Dec 15 | 4 Dec 16- Mar 14 | |
| ACTIVITY I Organize and host monthly Chief of Party meetings | Monthly meeting | 1 | V | V | V | |
| ACTIVITY 2 Support project-related domestic and international travel for Indonesian government counterparts or other parties | 5 person travel to regional conferences and workshops | | √ | | √ | |
| ACTIVITY 3 Disseminate best practices and lessons learned | Facebook page | | | | √* | |

Note:

^{*} The Facebook page was replaced by the API site on the Knowledge for Health (K4Health) website

BIOSECURITY IMPROVEMENT INNOVATION FUND

The BIIF manager was hired late in Q3. During this quarter, he built on the STTA conducted by Jerry Martin in Q3 and carried out the following Biosecurity Improvement Innovation Fund (BIIF) activities:

- Re-designed two BIIF brochures and three presentations (in English and Indonesian) to support BIIF roadshows.
- Conducted field visits to better understand the poultry value chain context and to explore innovative ideas from different partners.
- Presented the BIIF program to numerous private sector groups.
- Convened a USAID/FAO/SAFE meeting to review and determine the priorities under BIIF.
 Two BIIF priorities emerged from the discussion a truck and crates C&D (Cleaning and Disinfection) station, and the development of cost-effective disinfectants for Sector 3 farmers.
- SAFE received one proposal for the SMS pilot RFA and two proposals for the social media RFA. Given the low response, SAFE announced a bidders conference for the two RFAs in the Kompas newspaper and on the website: www.detik.com. The BIIF manager organized and chaired the bidder's conference for those interested in submitting proposals for two RFAs. The SMS pilot will support activities under Objective I, and the social media campaign will support consumer demand creation under Objective 2. Based on the interaction with the participants at the bidder's conference, SAFE expects a healthy number of proposals for both RFAs.
- Commenced drafting the next RFA for a truck and crates C&D station for dissemination in Q1 of Year 2.

MONITORING AND EVALUATION

The SAFE M&E Specialist and SAFE program staff continued monitoring activities during this quarter, include the following:

- Extensive monitoring of the structural changes at the Teaching Farms (TFs).
- Monitoring and evaluation of the new biosecurity and GF practices applied at the TFs.
- Field visits to demonstration markets and to observe community activities conducted by field facilitators and members of the Indonesian Red Cross (PMI) volunteer network.
- Monitoring of market vendor and market manager training results.
- In selected cases, pre- and post-training evaluations were conducted to measure the changes in knowledge and comprehension and to learn how SAFE can improve the training for

subsequent groups, including the training for industry technical services staff and the training for field facilitators and Dinas officials.

- The communication research specialist monitored the University of Indonesia (UI) training of interviewers and data collection for the Household Utilization Survey (HUS).
- The M&E specialist accompanied staff from the Center for Health Research at the University
 of Indonesia (PPK UI), monitored the collection of baseline data, and addressed several
 challenges during the process.

In the area of evaluation, SAFE developed the design and TOR for two evaluations to be conducted during the project: the Commercial Farm Evaluation Study and the Live Bird Market Evaluation Study. These evaluation studies are designed to provide evidence-based information on the outcomes and effectiveness of implementing changes in biosecurity conditions and practices at Sector 3 farms and live bird markets in West Java and Banten provinces. A summary of each evaluation is provided below.

Commercial Farm Evaluation Study

SAFE will conduct an evaluation study in Year 2 and Year 3 to measure changes at the farm level attributable to the TF program. The changes that will be evaluated include:

- i. Changes in conditions (structural) that reduce the risk of Al and other poultry disease transmission. Examples include restricting access to farms by putting in place locks on gates, fenced areas, and a pass-over system.
- ii. Changes in good farming and biosecurity practices that reduce the risk of poultry disease transmission. Examples include the use of a footwear exchange system and the appropriate disposal of dead chickens.
- iii. Changes in the incidence of poultry mortality throughout production cycles.

This study will be linked to the measurement of the following indicators: Outcome 1.0 – "decrease in total poultry mortality at program Sector 3 commercial farms in high risk areas" and Output 1.2 – "adoption of biosecurity and good farming practices and conditions at Sector 3 farms."

Baseline data for this study were collected this quarter through a subcontract with the Center for Health Research at the University of Indonesia (PPK UI). The purpose of the study was to measure pre-SAFE intervention conditions, practices and mortality rates at sample Sector 3 commercial farms and a control group of 20.

Despite many challenges, PPK UI was able to compile data from 114 program farms and 20 control farms. The data for the TFs will be added, making a total of 125 program farms and 20 control farms. The draft and final reports will be submitted in Quarter 5.

Live Bird Market Evaluation Study

The purpose of the LBM Study is to measure changes in the program-assisted LBMs as a result of the Healthy Market and Community Initiative Program. The changes that will be evaluated include:

i. Changes in conditions that reduce the risk of Al and other poultry disease transmission. Examples include the creation of a zoning area, and access to waste bins and waste

management.

- ii. Changes in biosecurity practices that reduce the risk of poultry disease transmission. Examples include appropriate disposal of poultry waste, cleaning of vendor stall areas, and appropriate apron usage.
- iii. Changes in the presence of H5N1 AI in vendor stall areas.

Findings will support measurement of the following indicator: Outcome 2.0 – "improved risk reduction practices."

During this quarter, baseline data were collected for points i and ii above. Baseline data for point iii will be collected through a subcontract with the Bogor Agricultural Institute (IPB). A subcontract is ready to be signed with IPB. The initial TOR and surveillance design as well as the IPB proposal were reviewed by USAID, the Gol/CMU and FAO. It took time to adequately address Gol concerns and communicate the changes to IPB. The baseline data will be collected early in Year 2.

SAFE PROGRAM YEAR I HIGHLIGHTS

Year I of the SAFE program focused on implementing the program in the context of an everchanging set of public health avian and pandemic influenza (API) threats in Indonesia. The program work plan was developed to address the most pressing API challenges in high-risk districts based on a review of the most recent research and programmatic findings from the Government of Indonesia and international stakeholders, and extensive consultation with colleagues. Broad advocacy efforts conducted with the poultry industry and local government ensured commitment and ownership of the program as well as a set of interventions that support the priorities of the national government.

The overall approach of the program has been incentive-based, entrepreneurial and collaborative. SAFE has taken into account the fundamental question of incentives. SAFE has conducted multiple qualitative studies to understand the motivation of each audience, from farmers to consumers. Communication and educational materials have been developed to promote improved practices that use business and personal incentives to achieve better public health. The Teaching Farm approach builds on the private sector's ability to recognize and copy good ideas. SAFE has capitalized on the entrepreneurial spirit of early adopters and identified and drawn attention to industry staff and farmers that model change. SAFE has also worked closely with the Indonesian government and private sector leaders and has ensured that program activities are coordinated with international stakeholders. We highlight below the main accomplishments during the first year of program implementation.

PUBLIC AND PRIVATE SECTORS COMMIT TO IMPROVED BIOSECURITY AND GOOD FARMING PRACTICES

Poultry industry senior management, representing 80% of the national broiler production, gathers at the industry's first Industry Convention on Biosecurity and agrees to improve biosecurity and good management practices to reduce poultry disease transmission in the high-risk areas of West Java and Banten provinces. Industry, comprised of large Sector I and 2 companies, independent farmers and poultry shops, commits staff time, Technical Service staff capacity building, and supervision and monitoring of Sector 3 broiler farms, to support improvements in biosecurity and good farming practices. The poultry industry employs more than 10 million people and has an annual turnover of approximately US\$30 billion.

IPB and **UNPAD** universities and **SMK** Nurul Huda Vocational School agree to improve the technical and practical knowledge of student graduates.

Eleven farms commit to implementing structural and behavioral changes and become Indonesia's first Teaching Farms (TFs), and model good biosecurity and farming practices to decrease poultry disease and improve poultry production. These eleven farms are upgraded to offer a learning experience to the visiting farmers. Each TF has educational "stations" where visitors can see good biosecurity in use. MP4 players and headsets with pre-recorded biosecurity information are provided to each visiting farmer or student, and biosecurity options for different types of farms are visible for all to see. At the end of the tour a booklet summarizing what they have seen is provided and a visitor follow-up program ensures technical support for visitors planning to implement changes at their farms. Over **500 farms** and their workers are expected to go through the TFs during Year 2.

Twenty live bird market managers and district-level trade offices agree to not only promote

but enforce policies that result in cleaner markets and the sale of healthier poultry to reduce disease transmission.

Local government in the high-risk provinces of West Java and Banten, led by the heads of the provincial livestock and animal health offices who participate in SAFE strategy setting, commit to assisting with implementation of changes that will lead to cleaner live bird markets and healthier poultry at 20 live bird markets.

BUILDING LOCAL CAPACITY

Approximately **400** poultry industry members, facilitators, Red Cross volunteers and **Dinas government staff** participate in group or one-on-one trainings. Their capacity is built to serve as the foundation for the rapid intensification of program work in Year 2. While these direct beneficiaries of the training had already begun to impact others in the value chain at the end of Year I, the bulk of their work will begin in Year 2, and the results of their efforts will be measurable in Years 2 and 3. Exponential reach

Industry Technical Service (TS) staff gain technical, motivational, planning, finance and supervision skills to support Sector 3 broiler farmers implementing new biosecurity and good farming practices to reduce the incidence of poultry diseases, including Al.

Sector 3 broiler farm owners, managers and workers at Teaching Farms receive one-on-one technical assistance from SAFE staff to improve compliance with required biosecurity and good farming conditions and practices. Improved areas include application of practical approaches to limiting entrance of vehicles and people into the farm and an easy-to-monitor sandal exchange system at the chicken house door – the last line of defense – in order to restrict the introduction of unwanted microbes.

Contract broiler farmers become the first visitors to the Teaching Farms that learn about and see first-hand the biosecurity and good farming techniques and systems that they can implement in their farms to improve poultry health and production, and decrease poultry mortality. Hundreds more visitors will follow in subsequent months.

In collaboration with FAO, local government animal husbandry professionals are trained in cleaning and disinfection techniques at Sederhana Market in Sukajadi, Bandung and Panorama Market in Lembang, West Bandung.

Live bird market managers are trained on effective approaches to managing the market and identify creative activities to motivate and support changes by vendors, such as the development of waste management in the market, setting up a cleaning team for market cleaning day, and a clean water management process.

Vendors now have the ability to identify problems within their markets and have access to solutions as well as resource staff at the Dinas.



Cleaning and disinfection practices at Sederhana live bird market in Bandung. 10 district animal health services officers underwent practical training on cleaning and disinfection techniques, in collaboration with FAO and MOA.

Field facilitators, engaged through the Indonesian Red Cross, are trained in participatory approaches, needs assessments, mapping techniques, problem identification, problem solving, proposal development, stakeholder analysis, and advocacy. With these skills they can serve as catalysts for rapid changes in the markets, and as a temporary bridge between local government Dinas staff and live bird market vendors to improve hygiene and sanitation and reduce the risk of poultry disease transmission.

INDONESIA'S FIRST POULTRY TEACHING FARMS OPEN IN DISEASE-CONTROL EFFORT

The first 11 Indonesian Teaching Farms (TFs) were created to respond to the need for Sector 3 broiler farm workers and animal husbandry students to visualize biosecurity and good farm management practices, and to move beyond the traditional classroom setting by having hands-on field-level training. This learning approach is simple yet powerful. Visitors see new cost-effective fences installed to prevent other animals entering the farm. Bags of feed are shuttled through a pass-through or pass-over system at the farm entrance gate to prevent the transfer of microorganisms from humans and vehicles entering the farm. For the same reason, workers and visitors are required to change their footwear before entering the farm. Because hands are the principal carriers of disease-carrying germs, a washbasin and soap are required inside each Teaching Farm for thorough hand washing to kill bacteria and viruses. Workers must change into washed and disinfected footwear before entering the chicken houses in order to eliminate the spread of microorganisms that birds or cats may have brought into the farmyard.

To reinforce the learning experience, multiple educational "stations" demonstrate disease prevention techniques, an MP4 audio player contains key biosecurity messages, and handouts are distributed to each visitor. A bulletin board at the end of the tour displays before-and-after photographs, farmer testimonials, and messages of support from influential stakeholders.





Solihim Farm, before and after.

Technical Service staff from Sector I firms and poultry shops accompany the farmers in their charge to the Teaching Farms. At the end of the tour, the farmers are invited to complete an exit survey through which they can indicate their interest in receiving assistance to modify their farms. TS and SAFE staff contact farmers who have visited the TF and offer them one-on-one assistance. The assistance will also include group discussions and sharing of problem-solving experiences. The ultimate goal is for the typical Sector 3 broiler farmer to implement the practices that he has seen, heard and read about at the TF. Over 500 farms and their workers are scheduled to visit the TFs in Year 2.

For the three farms operated by educational institutions (IPB, UNPAD and SMK Nurul Huda Vocational School), students are taken to the TF as part of the curriculum. They are also given the opportunity to work on the farms, care for the chickens and follow good biosecurity and farming practices, so reinforcing theory with hands-on practice.

LIVE BIRD MARKET MANAGERS, VENDORS AND LOCAL GOVERNMENT OFFICES CREATE A FOUNDATION FOR CHANGE

Government and stakeholder consultative meetings in all program districts, joint assessments and selection decisions on the **20 demonstration markets**, and participatory mapping of these markets resulted in local ownership of SAFE program activities as well as detailed plans for changes that contribute to a reduction in risk of disease transmission among poultry and from poultry to humans.

These plans for change were developed by the District Livestock Services staff, District Industry and Trade Office staff, market managers, and members of the market's poultry supply chain, including vendors, slaughterers, and transporters. The group jointly identified conditions and practices that need to be changed, the financial resources required to sustain the changes (including out-of-pocket or in-kind contributions from market stakeholders), and a plan for detailed activities throughout the year.

Each demonstration market is surrounded by a network of other markets that will visit and learn from the changes implemented in the demonstration market. By the end of Year 2, **30 additional LBMs** will become part of the program. Community events and social mobilization activities will also link surrounding communities to both the demonstration and adjacent markets where key messages on consumer demand for healthy poultry products can be reinforced. A social media campaign will reinforce the importance and power of the consumer to demand changes at the market, in particular cleanliness of the vendor stalls and ultimately a healthy poultry product.

MESSAGE CONSISTENCY THROUGH DEVELOPMENT OF INFORMATION, EDUCATION AND COMMUNICATION MATERIALS AND TOOLS

SAFE developed a set of communication materials based on the **2011 Consensus Report: Priority Audiences and Behaviors for Reducing the Risk of AI Transmission in Indonesia**, which was updated this year through a collaborative effort led by SAFE.

The information, education and communication materials were designed, field-tested and vetted with key stakeholders. These materials support all of the activities under the SAFE program and are also distributed to stakeholders for their own use. The partner logos of government ministries and respected international organizations that are included in the materials serve to support the harmonization of messages, help eliminate conflicting messages, and increase credibility. These logos include the MOA, MOH, FAO, WHO, USAID and SAFE.

The main hard copy materials developed this year are summarized below:

- Teaching Farm mock-up
- Teaching Farm booklet summarizing the key TF biosecurity and GF practices
- Poster containing all key value chain audiences and the central message
- Eight posters directed at each of the eight individual target audiences: Sector 3 Poultry Producers, Backyard Poultry Owners, Traders and Transporters, Poultry Slaughterers, Collector Yards, Live Bird Market Vendors, Market Managers, and Consumers of Poultry Meat and Eggs



















- A separate poster to be used to support consumer demand for healthy poultry products
- Leaflets providing details for the eight target audiences mentioned earlier
- Flipchart for use by facilitators
- Pictorial cards for use by facilitators

Additional communication tools include:

- Recorded messages for the MP4 player used during the Teaching Farm tours
- Draft script for radio drama
- Merchandizing items for enter-educate and community activities such as T-shirts, vest, apron, shopping bag, mug, and a 2012 calendar containing the core messages

ENGAGING THE POWER OF THE CONSUMER

SAFE is working with two NGOs – Aisyiyah and COMBINE – to implement a consumer empowerment campaign directed at influencing and motivating the consumer to demand clean live bird markets and healthy poultry products. A grant was awarded to each of these two NGOs at the end of the year. Under these grants both NGOs are utilizing their media network (including social media) for healthy market initiative activities. They will hold meetings with decision makers and community leaders to endorse the inclusion of healthy market activities in the budget allocation process at the district planning forum (*Musrenbang*). With both NGOs advocating and reinforcing the same messages, community leaders will perceive cleanliness at the market and healthy products as important and worthwhile subjects for advocacy and support.

Each NGO has distinct advantages. Aisyiyah is conducting consumer demand generation activities through a faith-based approach and messaging. Being the women's branch of Muhammadiyah, the second largest Muslim organization in Indonesia, Aisyiyah's target audience is mainly female Muslims. Meanwhile, COMBINE maximizes the use of community-based media to achieve similar results. For example, they will produce and screen at markets and in nearby communities short films recorded on mobile phones about healthy market initiatives.

Members of the Indonesian Red Cross volunteer network conducted **peer-to-peer education** among consumers while **educational entertainment** events have already been implemented in the LBM surrounding areas. These activities will lead to communities with greater confidence and positive self-efficacy, as a powerful base for consumer empowerment.



Consumer education on healthy products and healthiness in Bogor-Jonggol market, conducted by trained volunteers from PMI and the community

COST SHARING

Sector 3 broiler farms contributed with labor, supplies and fencing materials, and sometimes cash, to improve the conditions of their farms and convert them into Teaching Farms. Their average contribution to the 11 Teaching Farms was 16%. The owner of the Muslikhin farm provided over 4 million rupiah to purchase wire fencing and bamboo as part of a total contribution of IDR 9 million, equivalent to 34% of the total budget allocated for biosecurity-related improvements at his farm. This was the largest contribution made by a farmer to date.

NGO grantees Aisyiyah and COMBINE are contributing 10.5% in in-kind contributions. Meanwhile, the recipients of the 20 grants for live bird market improvements are required to contribute a minimum of 10% of costs, but are actually contributing an average of 16.3%, with the funds coming from both market vendors and stakeholders. Local government offices have committed to contribute disinfectant as well as labor and expertise to the demonstration market managers and vendors.

During this year, the **Tasikmalaya district government** agreed to allocate a budget of IDR 75 million from the budget of the Department of Cooperatives, Industry and Commerce to construct drainage in Ciawi Market in conjunction with SAFE activities at this market. This budget will be disbursed during Year 2 of the program.

GRANTS REINFORCE AND SUPPORT CHANGE

During Year I, SAFE grants fell into one of three types of programmatic categories:

- a. Grants that will support changes at 20 LBMs, with 10 already approved and 10 others to follow.
- b. Grants awarded to support two NGOs in their work at the community level, including networking, with changes focusing on consumer demand for healthier products through women's consumer groups and religious groups. Aisyiyah and COMBINE have already begun their activitiesby.
- c. Biosecurity Improvement Innovation Fund. Two RFAs were developed, approved by USAID and then advertised. A bidder's conference was held with 16 interested bidders to answer their questions, discuss expectations and assist them through the USAID grant proposal submission process.

These grants will empower live bird market managers and vendors, and the communities surrounding these markets, to implement long-lasting changes. They will also strengthen and expand biosecurity and good farming practices compliance at the Sector 3 broiler farm level. Innovation and partnership are key components of all the work in this area.

RESEARCH FOR EVIDENCE-BASED PROGRAMMING

Under the SAFE umbrella and in conjunction with the CDCs in Atlanta and Jakarta and the WHO, two research surveys were conducted: I) Health Utilization Survey (HUS); and 2) Clinician Knowledge, Attitudes and Practices (KAP) Survey. SAFE will use the results of these studies to inform programming of two separate program objectives: a) decreasing the number of days it takes

an individual to seek healthcare after the onset of Al/ILI/ARI symptoms; and b) improving the healthcare services provided once the individual reaches a healthcare facility.

The HUS was conducted and topline findings were presented during Year I. The Clinician KAP survey was begun in Year I and will be completed early in Year 2. SAFE will present the Clinician KAP topline findings in Year 2. The two research surveys are described below.

Health Utilization Survey (HUS)

HUS is a community-based household survey to develop estimates of the seasonal influenza disease burden and to determine the proportion of people with ILI that seek care, their understanding of signs and symptoms that indicate the need for care, and decision-making on when and where to seek care for respiratory illness.

The HUS findings will be used in conjunction with enhanced surveillance data collected in a separate study for the purpose of developing disease burden estimates for seasonal influenza among East Jakarta Municipality residents who present as outpatients with ILI, or as hospitalized patients with SARI (e.g., pneumonia). The HUS findings will also be used to inform preventive education strategies at the community level to reduce avian-to-human transmission of the H5NI virus and to reduce delays in care seeking that can result in higher-than-necessary mortality rates.

Clinician Knowledge, Attitudes and Practices (KAP) Survey

The Clinician KAP surveyed government and private sector healthcare providers who provide medical care for children and adults at primary care outpatient clinics and for hospitalized patients at healthcare facilities, to determine (i) their knowledge of human illness from H5NI virus infection, or seasonal influenza virus infection, and (ii) clinical practice/management of patients with influenza-like illness (ILI, defined as fever and either a cough or a sore throat) or severe acute respiratory infection (SARI, e.g., pneumonia), and of patients diagnosed as suspected H5NI cases or as having seasonal (influenza A or B virus infection) or pandemic influenza (2009 H1NI virus infection).

The findings of this survey will be used to inform clinician education efforts to improve H5N1 casepatient detection and provide earlier antiviral treatment.

In addition, three studies were conducted this year to learn the knowledge and attitudes and barriers to behavior change of the Sector 3 broiler farmers and select members of the supply chain. These are listed and described below.

KAP 2009 Secondary Data Analysis

This analysis was conducted by Johns Hopkins University Center for Communication Program, an implementing partner of the SAFE program. It provides additional insight into the common practices and adherence to recommended behaviors by traders and transporters, market vendors and poultry slaughters.

Rapid Needs Assessment

This informational needs assessment provided information on key audiences and behaviors to gain insight into the current feasibility of behaviors, interest, and economic value of particular Al risk reduction behaviors from a commercial perspective. This study was done in preparation for updating the 2011 Consensus Report.

Sector 3 Broiler Farm Survey

This qualitative study summarized the level of knowledge that farmers have about biosecurity and the technical aspects of good farming practices for reducing poultry disease transmission. It looked specifically at the new practices and techniques to be introduced through the TFs and identified to what extent farmers have practiced these measures and what factors facilitate and hinder the farmers in adopting them.

LAYING THE FOUNDATION FOR EVALUATION

In close collaboration with its partners, SAFE designed two evaluation studies that will support monitoring and evaluation efforts. The Commercial Farm Evaluation Study and the Live Bird Markets Evaluation Study are designed to provide evidence-based information on the outcomes and effectiveness of implementing changes in biosecurity conditions and practices at Sector 3 broiler farms and live bird markets, respectively, in West Java and Banten provinces.

Specifically, the Commercial Farm Evaluation Study, which is being conducted in close collaboration with the poultry industry, will evaluate:

- I. Changes in conditions (structural) that reduce the risk of Al and other poultry disease transmission. Examples include restricting access to farms by putting locks on gates, fencing areas, and putting a pass-over system in place.
- Changes in good farming and biosecurity practices that reduce the risk of poultry disease transmission. Examples include the use of a footwear exchange system and appropriate disposal of dead chickens.
- 3. Changes in the incidence of poultry mortality throughout production cycles.

The Live Bird Market Evaluation Study, which will be conducted in close collaboration with the national and local governments and the FAO, will evaluate:

- 1. Changes in conditions that reduce the risk of Al and other poultry disease transmission. Examples include the creation of a zoning area, access to waste bins and waste management.
- Changes in biosecurity practices that reduce the risk of poultry disease transmission.
 Examples include appropriate disposal of poultry waste, cleaning of vendor stall areas, and appropriate apron usage.
- 3. Changes in the presence of H5N1 Al at vendor stall areas.

For the Commercial Farm Evaluation Study, baseline data were collected from 100 Sector 3 broiler farms and 20 control group farms. The baseline for the Live Bird Market Evaluation Study will be collected in the initial weeks of Year 2, once all input provided by the Gol has been incorporated into the final design.